

I am now preparing to lead an advance party through Austria Sound, toward Cape Fligely, and will endeavor to obtain as accurate and full meteorological data as possible, a copy of which I will forward to you at the earliest possible moment.

Local time has been used in all cases of observations thus far, and in that connection I have also located position as accurately as possible to be obtained, much of the time in fog and ice.

In an accompanying letter of August 3, at the same place, Mr. Baldwin says:

We have decided to attempt to make our northing from this point, and as the *Frithjof* will soon leave us in pursuit of walrus, I have no alternative left but to give you an earnest of my intention. \* \* \* We will have a long, hard pull for the next year, but when we hear from our friends a year hence, it will make up for all the hardships. Papers and letters sent to us in care of our Agent at Tromsø, Norway, Consul Andrew Aagaard, should be posted about May 1, 1898. He will forward same by next year's steamer.

I suppose by the time we return you will have established several stations in Cuba.

### RECENT EARTHQUAKES.

Prof. E. W. Morley, of Adelbert College, Cleveland, Ohio, reports that no seismic disturbance was recorded on his seismometer during August and September. Prof. C. F. Marvin reports the same with regard to the seismograph at the Weather Bureau in Washington.

Sunday, August 14, at Oak Point and several other places on the St. John River, N. J. The first shock was felt at 3:45 a. m., St. John local time, viz, about 3:09 a. m., seventy-fifth meridian time. The second shock was felt at about 3:50 a. m., local, or 3:14 seventy-fifth time. [1 p. m., St. John local time, is simultaneous with 12:24:16, seventy-fifth meridian time.] The shocks were preceded by a noise, and the first shock was sufficiently strong to overturn light objects and awaken people. It seems to have been felt most at Oak Point and vicinity (N. 45° 30', W. 66° 05').

Friday, September 16, Mr. T. B. A. Watson, of Hartington, Nebr., writes that at 3:59 a. m. (central time) a slight earthquake shock was felt at this place (Cedar County, N. 42° 40'; W. 97° 10'). The vibration seemed to be traveling from northeast to southwest; it shook every building, rattling the windows; the approach was preceded by a rumbling sound not unlike the roll of distant thunder, followed by a distinct shock lasting one second, then vibrations for about five seconds, then another shock similar to the first; the total duration was about ten or fifteen seconds (including the preliminary rumble?—ED.). Only one similar experience, viz, the slight vibrations at 5:45 a. m., February 4, 1896, is known to have occurred at this place.

Saturday, September 17, at Morrills Corner, 3 miles dis-

tant from Portland, Me., first shock at 10:54 a. m., lasting seven seconds, followed after an interval of eleven seconds by a second shock, lasting five seconds. This is the first earthquake at that place since February 17. It was recorded on a seismograph belonging to Mr. Robert Balch, who says that the first shock deflected the needle 0.09 inch, in a series of regular waves, and the second shock deflected it 0.07 inch in two sharp waves.

### THE RAINFALL OF MAY IN JAMAICA.

According to the Jamaica weather report for May, 1898, the rainfall for the whole island was 85 per cent above the average.

This result has been chiefly attained by heavy rains between the 23d and 27th of May, due to a shallow cyclonic depression which traveled from west to east, northward of Jamaica. In the west of Jamaica the heaviest rainfall occurred on the 24th, and in the eastern portion of the island on the 25th. On an average between 5 and 7 inches fell on one or the other of these days all over the island, and in the cases of 13 stations which had during the month over 10 inches in one day, all but two occurred on the 25th in the east, and the 24th in the west. A phenomenal fall of 28.66 inches occurred at Cinchona Plantation on the 25th, concerning which special inquiry was made. The Superintendent, in reply, states as follows: "I beg to say there is no mistake whatever about the rainfall (28.66 inches) here on the 25th of May. We had to measure the rain three times during the day to prevent the gauge overflowing, and of course after measuring, the water was thrown away; it was not measured over a second time. We had steady heavy rain all day on the 25th; I don't think it ceased raining for five minutes during the twenty-four hours. During the night we had high winds which blew down a number of trees." It will thus be seen that the rate of fall was not excessive, being not much more than 1 inch an hour, but the fall continued at this rate for twenty-four hours, producing the phenomenal record for the day of 28 inches.

Although the rainfall for the whole island was 85 per cent above the average, and the rainfall at Cinchona quite unprecedented, yet, the average for the island was not so large as on several previous occasions. The following table gives the heavy monthly falls since 1870, viz, those months for which the average for the whole island exceeded 15 inches:

Year.	Month.	Rainfall.	Year.	Month.	Rainfall.
1870 .....	May .....	17.38	1886 .....	June .....	23.42
1870 .....	October .....	16.74	1888 .....	May .....	20.18
1879 .....	October .....	15.69	1897 .....	October .....	19.30
1885 .....	December .....	15.60	1898 .....	May .....	16.62

NOTE.—Editorial notes for which there was no room in the MONTHLY WEATHER REVIEW for September must be deferred to the next number.—ED.

### METEOROLOGICAL TABLES AND CHARTS.

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For text descriptive of tables and charts see page 366 of REVIEW for August, 1898.